

Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2019 To Marc	h, <u>2020</u>		Permit No.	ILR40 0332						
MS4 OPERATOR INFORMATION: (As it appears on	the current	permit)								
Name: CITY OF EAST ST. LOUIS	Name: CITY OF EAST ST. LOUIS Mailing Address 1: 613 N. 20TH STREET									
Mailing Address 2:			County: St.	Clair						
City: EAST ST. LOUIS Sta	te: IL_	Zip: 62201	Telephone: 6	18-482-6812						
Contact Person: SAMUEL SWANSON (Person responsible for Annual Report)	Email	Address: sswanson	@cesl.us							
Name(s) of governmental entity(ies) in which MS4 is I	located: (A	s it appears on the	current permit	1						
ILLINOIS DEPARTMENT OF TRANSPORTATION	ST. CL	AIR COUNTY								
CENTREVILLE TOWNSHIP	CANTE	EN TOWNSHIP								
THE FOLLOWING ITEMS MUST BE ADDRESSED.										
 A. Changes to best management practices (check appropries regarding change(s) to BMP and measurable goals.) 	priate B MP	change(s) and attacl	n information							
Public Education and Outreach	4. Constr	uction Site Runoff Co	ontrol	7						
2. Public Participation/Involvement	5. Post-C	onstruction Runoff C	ontrol							
3. Illicit Discharge Detection & Elimination	6. Pollution	on Prevention/Good I	Housekeeping	✓						
B. Attach the status of compliance with permit conditions, management practices and progress towards achieving MEP, and your identified measurable goals for each of	g the statut	ory goal of reducing t	he discharge of							
C. Attach results of information collected and analyzed, in	ncluding mo	nitoring data, if any o	during the report	ing period.						
D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)										
E. Attach notice that you are relying on another government	ent entity to	satisfy some of your	permit obligation	ns (if applicable).						
F. Attach a list of construction projects that your entity has	s paid for d	uring the reporting pe	eriod.							
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))										
Owner Signature:	_	3/14	/2020 ate:							
Samuel Swanson		,	ate. ector							
Printed Name:			tle:							

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

WATER POLLUTION CONTROL

COMPLIANCE ASSURANCE SECTION #19 1021 NORTH GRAND AVENUE EAST

POST OFFICE BOX 19276

IL 532 2585

SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form WPC 691 Rev 6/10 has been approved by the Forms Management Center.

ADMINISTRATIVE REVISIONS TO THE NOTICE OF INTENT

Revisions to the original Notice of Intent (NOI) are reflected below.

MS4 Operator Mailing Ad	dress: Yes		No _	X
Persons Responsible:	Yes	<u>X</u>	No _	
Name:	Samuel Swanson			
Title:	Director			
Telephone Number:	(618) 482-6812			
Area of Responsibility:	Public Works			

Introduction

In 2003, St. Clair County (County), Illinois and its communities created a Co-Permittee Group to join forces in complying with the National Pollutant Discharge Elimination System (NPDES) for Municipal Separate Storm Sewer Systems (MS4) Phase II requirements. As stated in the original 2003 Notice of Intent (NOI), the County and the Co-Permittee communities were to pool resources and work together to comply with the commitments made within the NOI for the benefit of all within the County.

The Co-Permittee Group was active during this reporting period. Significant progress was made sharing Best Management Practices (BMPs) for document retention, operation procedures, and maintenance activities.

Best Management Practice (BMP) Summary of 2019-2020 Activities

In 2003, each member of the Co-Permittee Group submitted a NOI in compliance with the first 5-year cycle. In 2008, a NOI was submitted in compliance with the next 5-year cycle, as written in the first MS4 permit. The 2009 NOI was submitted in compliance with additional requirements in the second MS4 permit. In 2013, a new NOI was submitted for the next 5-year cycle and was in place starting in March 2014. As stated in the 2003, 2008, 2009, and 2013 NOIs, each Co-Permittee Member identified certain activities to comply with the Phase II requirements. Below is an abbreviated summary of the BMPs that were written in the NOI for each of the minimum control measures.

March 2019-February 2020:

- 1) **A.1-** Storm water brochures for businesses, homeowners, children, and green infrastructures were to be promoted and displayed by each community in a public place.
- 2) **A.4-** St. Clair County sponsored a booth at the County Fair and/or Earth Day and distributed the storm water and green infrastructure brochures.
- 3) **A.5** St. Clair County posted newsletters on the County Health Department website during school months. Co-Permittee Members distributed educational materials to schools in their communities. The amount of material distributed was to be tracked by the communities.
- 4) **B.3** The Co-Permittee Group met three (3) times to review upcoming permit requirements, notice of intent, review storm water management program, operations training, and to develop and submit the Annual Report.
- 5) **B.5-** Co-Permittee Members solicited and encouraged public assistance in monitoring the community's storm water system. Public inquiries and complaints were responded to and recorded.
- 6) **B.6-** St. Clair County continued to promote programs related to storm water activities and recycling programs. The community tracked its participation.

IEPA Annual Report for NPDES Permit for Storm Water Discharges from MS4 - Report Period: March 2019 through February 2020.

- 7) **C.1-** Co-Permittee Members updated any new or revised storm sewers and performed stream observations at bridge inspections.
- 8) **C.5-** A survey of previously installed stencils was to be performed as well as replacing or placing any that needed inlet stencils.
- 9) **C.6-** Communication brochures were distributed to the community. Co-Permittee Members discussed any known illicit discharge ordinance compliance issues in the communities.
- 10) **C.9-** Co-Permittee Members developed brochures addressing specific storm water ordinance prohibited activities and distributed with educational brochures.
- 11) **D.1, E.2, E.4-** Community storm water ordinances were to be updated, if needed, and require a SWPPP on site plans disturbing more than one acre.
- 12) **D.2, F.1-** The Co-Permittee held an Operations Training class. Topics included a review of the history of drainage systems, the Clean Water Act and NPDES permits, and the impacts of storm water.
- 13) **D.5-** St. Clair County continued to maintain a storm water hotline number to address public concerns related to storm water issues. County tracked and reported the number of calls.
- 14) **F.6-** Communities reviewed operating procedures and BMPs and modified if necessary.

The following pages highlight changes made to the BMPs from the NOI, BMP status, and activities planned for the next reporting year. Additional information is also provided from the County and each Community.

It is to be noted that some BMPs will continue on to the next NOI, but some will be stopped, and others added to fulfill the requirements of the permit. The 2014-2019 NOI can be found on the IEPA website.

Name: Debra Hamilton-Tidwell

Title: City Clerk

Telephone Number: (618) 482-6812

City of East St. Louis FOIA Officer for the reporting year:

COMMUNITY NAME:		City of East St. Louis	PERMIT #:			ILR400332		
		IEPA Annual Report for Storm Water Discharges from Ma	S4 Communities- Period: I	Maı	ch	2019 through February 2020		
A. Changes to Best Management- Were there any changes to the BMPs?		appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the				D. Summarize the storm water activities you plan to undertake with an implementation schedule		
Comment ⊔ ≻	ON	minimum control measures.	If attached information, describe.	YES	9 N	Activity	Schedule	
		d Paper Materials- Informational Brochures						
Milestone For Reporting	γ	ear: Promote the availability of brochures to the residents	S.			•		
	X	The City has brochures available to residents at the City Hall. Educational materials (150 brochures) were distributed at the public meeting held on February 13, 2020.			x	St. Clair County will have brochures available to all county residents at the Health Department.	Ongoing through 2020-2021 permit year.	
BMP No. A.4- Commu	nit	y Event- Sponsor Annual Booth at St. Clair County Ea	rth Day Festival					
Milestone For Reporting	Υŗ	ear: St. Clair County sponsored a booth at the Earth Day	Celebration.					
	X	St. Clair County sponsored a booth and distributed storm water materials at the Health Department Earth Day Celebration in April 2019. Approximately 100 storm water brochures were distributed.			х	St. Clair County is responsible for the booth and tracking the number of brochures handed out.	The 2020 Earth Day event will be in April.	
BMP No. A.5- Classro								
Milestone For Reporting	γ	ear: Communities distributed educational materials and t	racked the number of bro	chu	res	and other materials handed out to t	he schools.	
	X	St. Clair County posted educational newsletters on the Health Department's Website. East St. Louis distributed 150 educational brochures at a public town hall meeting.	Review of Classroom Education Materials- See page 11	X		The communities will inform local schools that the newsletters are available on the Health Department's Website.	Ongoing through 2020-2021 permit year.	

		IEPA Annual Report for Storm Water Discharges from M	S4 Communities- Period: N	Mar	rch	2019 through February 2020		
Management- Were there		B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the				D. Summarize the storm water activities you plan to undertake with an implementation schedule		
Comment C	2 2	minimum control measures.	If attached information, describe.	YES	ON N	Activity	Schedule	
		der's Meeting- Coordinate Meetings and Annual Reporters: Co-Permittee Group met three (3) times to complete		vd c	uhr	mit the Annual Penert		
		Co-Permittee Meetings were held on Feb. 28th, May 2nd, and October 31st, 2019. Annual reports were provided to communities in May 2019 and submitted to IEPA before June 1st, 2019. Meeting topics included: Annual Reporting and O&M Manuals, Reducing Road Salt Use and Visual Water Sampling Training, and Operations Training. City representatives attended two of the three meetings.			×	The City will continue to meet with the Co-Permittee Group to share BMPs and training opportunities. The Co-Permittee Group has planned three compliance/training activities for 2020.	Ongoing through 2020-2021 permit year.	
		Monitoring- Solicit and Encourage Public Assistance Year: Community will work to involve more public assistan					Vater Hotline	
iviliestorie i or ixeportin		The County updated its Website with the contact information for the reporting of storm water issues. Any calls or emails are recorded and addressed.	Se in reporting Storm water	130	X	The community will continue to respond to and record all public	Ongoing through 2020-2021 permit year.	
		Coordination- Participate in programs targeted at pub fear: St. Clair County continued to promote programs related						
iviliesione for Keportini		County will continue to promote programs related to storm water activities and recycling. Multiple media outlets will be used to communicate with municipalities.	Review of Community Events - See page 11	X		County will continue to promote programs related to storm water activities. Multiple media outlets will be used to communicate with municipalities.	Ongoing through 2020-2021 permit year.	

PERMIT #: ILR400332

		I	EPA Annual Report for Storm Water Discharges from M	S4 Communities- Period:	Mar	ch 2	2019 through February 2020		
A. Changes to Best Management- Were there any changes to the BMPs?		re	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the				D. Summarize the storm water activities you plar to undertake with an implementation schedule		
Comment	YES	9	minimum control measures.	If attached information, describe.	YES	ON N	Activity	Schedule	
			c Involvement - the community will provide a public			_			
Milestone for Reporting	ng	Ye	ar: The communities will provide a public meeting annua	lly for public input for the N	MS4	pro	ogram.		
		Χ	The City of East St. Louis held a public input meeting regarding the adequacy of the MS4 Program on February 13, 2020. No public input was received.	ng the adequacy of the MS4 Program on Review of Other Public X		Community will continue to hold a public meeting to solicit public input regarding the adequacy of the MS4 program.	Ongoing through 2020-2021 permit year.		
BMP No. C.1- Storm	S	ewe	er Map Preparation						
Milestone for Reporting	ng	Ye	ar: Co-Permittee member communities reviewed outfall	maps and conducted stre	am	obs	ervations annually at bridge inspec	tions.	
		х	Co-Permittee communities reviewed their outfall maps for completeness and updated them if necessary. East St. Louis currently has 100% of outfall locations mapped. The storm sewer system map was last updated in 2018.			X	Communities will continue to update their storm system maps to include modifications to the system.	Ongoing through 2020-2021 permit year.	
BMPs No. C.2, C.9-	Re	gul	atory Control Program- Ordinance language for Illic	t discharge/public notifi	cati	on			
Milestone for Reporting	ng	Ye	ar: Communication brochures were distributed to the cor	nmunity.					
		Χ	St. Clair County distributed illicit discharge brochures at the Earth Day event and has them available at the Health Department.			X	This BMP will not continue into the next NOI.		
BMP No. C.5- Inlet S			-						
Milestone for Reporting	ng	Ye	ar: Survey condition of inlet stencils.						
		Χ	The Community assessed the condition of the stencils. Replacement stencils were ordered in 2019 through an MS4 Co-Permittee group order.	Review of Illicit Source Removal Procedures - See page 11	х		Communities will survey samples of stencils previously installed, replace ones that need to be replaced, and assure all new inlets are installed with stencils.	Ongoing through 2020-2021 permit year.	
			I	~~~ '					

PERMIT #: _____

ILR400332

		I	EPA Annual Report for Storm Water Discharges from N	S4 Communities- Period: Ma	arc	ch 2019 through February 2020
Management- Were there any changes to the		re	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the	C. Provide results of information collected and analyzed, including monitori data. Information attached?		D. Summarize the storm water activities you plan to undertake with an implementation schedule
Comment	YES	NO	minimum control measures.	If attached information, describe.) -	Activity Schedule
BMP No. C.6- Progra	am	ιEν	valuation and Assessment			
Milestone for Reporting	ng	Ye	ar: Perform illicit discharge detection and elimination in	the Community's storm water	er s	system.
		Χ	Communities will perform stream observations during their annual bridge inspections and take appropriate action if any illicit discharge is found.			Communities will continue to perform stream observations and address illicit discharge per the community ordinance. Ongoing through 2020-2021 permit year.
BMP No. C.9- Public	: N	oti	fication			
Milestone for Reporting	ng	Ye	ar: Community will update ordinance brochure as need	ed.		
			Brochures will be updated to address specific storm water ordinance prohibited activities and distributed with brochures addressed in BMP A1.			X Ordinance brochures will be updated and distributed to the community throughout years 2015-2020 Brochure to be updated in 2020-2021 reporting year.
BMPs No. D.1, E.2, a	anc	d E	.4- Site Plan and Pre-Construction Review Procedu	es		
Milestone for Reporting	ng	Ye	ar: Update storm water ordinance.			
		X	A storm water ordinance update was not needed.			X This BMP will not continue into the next NOI.
BMP No. D.1- Regu						
Milestone for Reporting	ng	Ye	<u>ar:</u> Require SWPPP on all site plans disturbing more tha	n one acre of land inside the	С	Community.
		X	The community will require SWPPP on sites disturbing over 1 acre and adopt/enforce ordinance provisions.			The community will require SWPPP on sites disturbing over 1 X acre and verify the proper use of sediment and erosion control techniques. The community will require Ongoing through 2020-2021 permit year.

PERMIT #:

ILR400332

	IEPA Annual Report for Storm Water Discharges from M	S4 Communities- Period: Mare	ch 2	2019 through February 2020		
A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the	C. Provide results of information collected and analyzed, including monitoring data. Information attached?		D. Summarize the storm water activities you plant to undertake with an implementation schedule		
Comment S S	minimum control measures.	If attached information, describe.	ON	Activity	Schedule	
BMP No. D.2- Erosion a	nd Sediment Control BMPs					
Milestone for Reporting Ye	ear: Community will participate in BMP training during Anr	nual Operations Training.				
X	City representatives were unable to attend BMP training during the Annual Operations Training on October 31, 2019. An information packet was emailed to City representatives.		Χ	Community will continue to participate in BMP training.	Ongoing through 2020-2021 permit year.	
BMP No. D.5- Storm Wat	er Hotline					
	ear: County continued to maintain a storm water hotline no	umber to address public conce	erns	s related to storm water issues. Co	unty tracked and	
reported the number of ca	<u>lls.</u>					
X	St. Clair County maintained the hotline number during the reporting period. Communities respond to complaints of residents for storm-water-related issues.		X	County and Communities will respond to calls and emails for storm water issues.	Ongoing through 2020-2021 permit year.	
BMPs No. D.6 and E.5- T	raining for Construction Site Inspectors					
Milestone for Reporting Ye	ear: Construction Site Inspection training was provided th	is year.				
x	No construction site inspection training was needed.		X	The last Construction Site Inspection training took place in April 2017. This BMP will not continue into the next NOI.		
BMP No. E.2- Regulatory						
Milestone for Reporting Ye	ear: Enforce Storm Water Ordinance.	· · · · · · · · · · · · · · · · · · ·				
X	Communities will continue to enforce their storm water ordinance and track changes made to the ordinance. The City had no changes this year.		Χ	Communities will continue to enforce their storm water ordinance.	Ongoing through 2020-2021 permit year.	

PERMIT #: ILR400332

COMMUNITY NAME:		E: City of East St. Louis	PERMIT #:_			ILR400332		
		IEPA Annual Report for Storm Water Discharges from I	1S4 Communities- Period: Ma	lar	rch 2	2019 through February 2020		
A. Changes to Best Management- Were there any changes to the BMPs?		B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the	C. Provide results of information collected and analyzed, including monitoring data. Information attached?			D. Summarize the storm water activities you plar to undertake with an implementation schedule		
Comment	Ω Ε	minimum control measures.	If attached information, describe.	YES	9	Activity	Schedule	
BMP No. E.4- Pre-Co	ns	truction Review of BMP Designs						
Milestone for Reportin	g`	Year: Review post-construction BMPs.						
		The community will require and review SWPPPs on sit plans disturbing more than one (1) acre of land.			×	Communities will review the post- construction BMPs on all sites that disturb more than one acre in land.	Ongoing through 2020-2021 permit year.	
BMP No. F.1- Employ								
Milestone for Reportin	g`	Year: The Co-Permittee held an Operations Training class	·					
		Training focused on a review of the history of drainage systems, the Clean Water Act and NPDES permits, and the impacts of storm water. City representatives were unable to attend operations training, but materials were emailed to them.			Х	The Co-Permittee Group will continue holding an Operations Training class as part of education requirements.	Ongoing through 2020-2021 permit year.	
		nicipal Operations Controls- Standard Operating Pro-						
Milestone for Reportin	g`	Year: Communities reviewed operating procedures and E	MPs and modified if necessa	ary	у.			
		Storm water operation procedures for the street department were reviewed and modified as necessary.			x	Operation procedures are reviewed annually. Co-Permittee meetings will include reference to review and update requirements.	Ongoing through 2020-2021 permit year.	

COMMUNITY NAME:	City of East St. Louis	PERMIT #:	ILR400332	_
	IEPA Annual Report for Storm Water Di	scharges from MS4 Communitie	s- Period: March 201	9 through February 2020

	ADDITIONAL INFORMATION							
BMP A.5	Classroom Educational Materials							
	The County has taken steps to educate school children on the severity of storm water pollution. The St. Clair County Health Department issues a newsletter each month and it is posted on the St. Clair County Health Department's Website. The newsletter consists of articles for students with a wide range of pollution topics, including storm water. The newsletter also lists upcoming recycling events and schools that have won past recycling contests.							
BMP B.6	Community Events - Recycling Programs							
	Throughout the year, St. Clair County sponsored community events that potentially could positively impact storm water quality. These activities include telephone book recycling and an ongoing "Clean Sweep" program. Telephone book recycling was sponsored by Illinois American Water. The county Website also has a brochure listing recycling sites for over 29 different materials.							
	East St. Louis participated in the IEPA "Government Only" tire recycling event on September 19, 2019, delivering 100 tons of tires.							
BMP B.7	Other Public Involvement							
	The City of East St. Louis held a town hall meeting to invite public input regarding the adequacy of the MS4 program on February 13, 2020. No feedback regarding the MS4 program or Environmental Justice was received. The public is encouraged to assist in monitoring the community's storm water system by reporting illegal dumping and discharge or storm water issues either directly to the City or through the County. The St. Clair County storm water hotline number is posted on the Website and is provided in educational brochures.							
BMP C.5	Illicit Source Removal Procedures							
	The St. Clair County Highway Department sponsors an Adopt-a-Highway Program throughout the County. By sponsoring this program, St. Clair County is eliminating a significant source of storm water pollution by keeping trash out of streams and keeping road ditches clear of debris for storm events.							

ADDITIONAL COMMUNITY ACTIVITIES

(Make additional copies of form, as necessary)

Community Name: City of East St. Louis Permit #: ILR400332

List any additional community-sponsored activities performed between March 2019 and February 2020 not listed in *Notice of Intent (NOI)* submittal, but which addresses one of the six minimum control measures:

The City cleaned between 300 and 400 catch basins during March 2019 - February 2020. (Some were cleaned more than twice.)

A three-cubic yard dumpster is used by the City for trash retrieved from road ditches and waterways that is emptied weekly.

East St. Louis estimated that 80 hours were spent street sweeping an estimated 200 miles of roadways during the reporting year.

Approximately 100 tons of tires were recycled during the IEPA-sponsored "Government Only" tire recycling event held on September 19, 2019.

Circle which minimum control measure addressed:

- 1. Public Education and Outreach
- 2. Public Participation/Involvement
- (3) Illicit Discharge Detection & Elimination
- 4. Construction Site Runoff Control
- Post-Construction Runoff Control
- 6. Pollution Prevention/Good Housekeeping

C. Information Collected and Analyzed during 2019-2020 Reporting Year

The NPDES permit effective March 1, 2016, requires MS4 permittees serving populations over 25,000 persons to conduct quarterly laboratory testing of storm water discharge. East St. Louis began storm water sampling during the first quarter of 2017. The samples were taken to a local accredited laboratory and tested for Fecal Coliform, Oil & Grease, Total Nitrogen, Total Phosphorous, Total Suspended Solids, and Chloride. The laboratory returned a reporting package that contains laboratory results and chain of custody forms in addition to standard report contents.

The City identified two locations for sampling each quarter within 48 hours of a ¼-inchor-greater rainfall event in a 24-hour period. If a sample cannot be taken during the quarter, an explanation will be provided. The storm water monitoring program will help evaluate the effectiveness of BMPs implemented to reduce pollutant loadings and water quality impacts. When trends in the data are identified, BMPs can be adjusted accordingly.

The laboratory reporting forms and information collected are attached. Sampling outfall locations for the reporting year were:

- Landsdowne Creek Access located at North 32nd Street between North Park Drive and Morris Avenue
- Schoenberger Creek Access located at North 79th Street between St. Clair Avenue and Church Lane

E. Reliance on Government Entities for Permit Obligations

Co-Permittee cooperation with County

F. List of Construction Projects during 2019-2020 Reporting Year

East St. Louis had no public construction projects during the reporting year

CITY OF EAST ST. LOUIS ILLINOIS DEPARTMENT OF PUBLIC WORKS

SPECIAL PROVISION FOR

Drainage Improvements 17th to 19th Streets

STANDARD SPECIFICATIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted April 1, 2016. Standard testing procedures and construction of this project shall be in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois. Traffic control shall be in accordance with the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways". Erosion control shall adhere with design criteria outlined in the "Illinois Urban Manual" current Edition. The "Manual of Test Procedures for Materials" in effect on the date of invitation for bid. Construction of sewers shall be in accordance with the Illinois Recommended Standards for Sewer Works, latest edition, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction designated as the City of East St. Louis, Section RFB 19-04 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

1. DESCRIPTION OF WORK:

The proposed improvements consist of the removal and replacement of storm sewer pipe, sidewalk, curb and gutter, roadway pavement, inlets, and manholes. The project also consists of placement high density polyethylene pipe. All new sewer pipe shall be Water Quality Pipe shall have non-infiltration/exfiltration joints. Manhole lids shall be watertight and have lift holes one (1) inch diameter or less. Portions of the pavement shall be milled and overlaid as shown on plans. Also, included as a major item is the placement of a pavement patch up the centerline of the roadway. The pavement patch shall consist of 8-inches of plain concrete base and 2-inches of asphalt surface course. along with all appurtenant construction thereto.

2. TRAFFIC CONTROL PLAN:

Traffic control shall be according to the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways,

AP ACCREC

WorkOrder: 19011341



January 30, 2019

Jennifer Gerwitz RJN Group 2000 South 8th St. St. Louis, MO 63104 TEL: (314) 588-9764

FAX:

RE: NPDES/15-3069 ESTL

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 1/24/2019 9:51:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Marvin L. Darling

Project Manager (618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II



Report Contents

http://www.teklabinc.com/

Client: RJN Group Work Order: 19011341
Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



Definitions

http://www.teklabinc.com/

Client: RJN Group Work Order: 19011341

Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
 - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
 - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
 - RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

Qualifiers

- # Unknown hydrocarbon
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



Client: RJN Group

Case Narrative

http://www.teklabinc.com/

Work Order: 19011341

Report Date: 30-Jan-2019

Client Project: NPDES/15-3069 ESTL

Cooler Receipt Temp: 1.22 °C

Locations

	Collinsville		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
Collinsville Air			Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Accreditations

http://www.teklabinc.com/

Client: RJN Group Work Order: 19011341

Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2019	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2019	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2019	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2019	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2019	Collinsville
Arkansas	ADEQ	88-0966		3/14/2019	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		2/28/2019	Collinsville
Kentucky	KDEP	98006		12/31/2019	Collinsville
Kentucky	UST	0073		1/31/2019	Collinsville
Louisiana	LDPH	LA016		12/31/2019	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2019	Collinsville



Laboratory Results

http://www.teklabinc.com/

Client: RJN Group Work Order: 19011341

Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019

Lab ID: 19011341-001 Client Sample ID: Landsdowne

Matrix: AQUEOUS Collection Date: 01/24/2019 8:10

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22NI	D ED. 9222 D MEMBR	ANE FILTER					
Fecal Coliform	*	10	< 10	CFU/100ml	10	01/24/2019 12:57	R257382
EPA 1664A							
Hexane Extractable Material	NELAP	6	< 6	mg/L	1	01/25/2019 12:09	R257426
EPA 600 351.2 R2.0, 353.2 R	2.0						
Nitrogen, Total	*	1.05	4.45	mg/L	1	01/28/2019 0:00	R257429
EPA 600 365.4 (TOTAL)							
Phosphorus, Total (as P)	NELAP	0.500	0.550	mg/L	1	01/25/2019 11:23	149779
STANDARD METHODS 2540	D 1997						
Total Suspended Solids	NELAP	6	37	mg/L	1	01/24/2019 13:48	R257347
STANDARD METHODS 4500	-CL E (TOTAL) 1997						
Chloride	NELAP	5	30	mg/L	1	01/25/2019 18:15	R257461



Laboratory Results

http://www.teklabinc.com/

Client: RJN Group Work Order: 19011341

Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019

Lab ID: 19011341-002 Client Sample ID: Schoenberger

Matrix: AQUEOUS Collection Date: 01/24/2019 8:30

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22ND	D ED. 9222 D MEMBR	ANE FILTER					
Fecal Coliform	*	10	250	CFU/100ml	10	01/24/2019 12:57	R257382
EPA 1664A							
Hexane Extractable Material	NELAP	6	< 6	mg/L	1	01/25/2019 12:09	R257426
EPA 600 351.2 R2.0, 353.2 R	2.0						
Nitrogen, Total	*	1.05	2.02	mg/L	1	01/25/2019 0:00	R257383
EPA 600 365.4 (TOTAL)							
Phosphorus, Total (as P)	NELAP	0.100	0.229	mg/L	1	01/25/2019 11:26	149779
STANDARD METHODS 2540	D 1997						
Total Suspended Solids	NELAP	6	53	mg/L	1	01/24/2019 13:48	R257347
STANDARD METHODS 4500	-CL E (TOTAL) 1997						
Chloride	NELAP	10	91	mg/L	2	01/25/2019 19:40	R257461



Water - pH acceptable upon receipt?

NPDES/CWA TCN interferences checked/treated in the field?

Receiving Check List

http://www.teklabinc.com/

Work Order: 19011341 Client: RJN Group Client Project: NPDES/15-3069 ESTL Report Date: 30-Jan-2019 Carrier: Sanjiv Vajjala Received By: MEK Elizabeth a thurley Reviewed by: Completed by: Mary E. Kemp On: On: 24-Jan-2019 24-Jan-2019 Mary E. Kemp Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 1.22 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **~** No 🗀 Yes **~** Chain of custody signed when relinquished and received? Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **V** No 🗌 Samples in proper container/bottle? Yes **~** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No \checkmark No 🗌 All samples received within holding time? Yes Field NA 🗸 Lab \square Reported field parameters measured: Yes 🗹 No 🗌 Container/Temp Blank temperature in compliance? When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected. No VOA vials 🗸 Water – at least one vial per sample has zero headspace? Yes 📙 No 🗀 No TOX containers Yes No 🗌 Water - TOX containers have zero headspace?

Yes 🗹

Yes

Any No responses must be detailed below or on the COC.

No 🗌

No 🗌

NA 🗸

CHAIN OF CUSTODY

Work order # 1901134

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pg.

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client RJN Group						Samples on: 🔟 ICE	∃) E	BLUE ICE	JE ICE	NO ICE	3CE	1.22	၁		
Address: 2000 South 8th St.)t.					Preserved in: III LAB	■ LAB	M FIE	9	.	Ĭ.	FOR LAB USE ONLY	SE ONLY		
City / State / Zip St. Louis, MO 63104	3104					Lab Notes:		0//0	T.						
Contact: Jennifer Gerwitz		Phone:		(314) 588-9764					ر درم						
E-Mail: jgerwitz@rjnmail.com		Fax:				Client Comments	ents								
Are these samples known to be involved in litigation? If yes, a surcharge will apply	itigation? If ye	s, a surcharge w	III apply	☐ Yes	on X	rainfall		0.85	7						
Are these samples known to be hazardous?	met on the re	KI No quested analysis'	?. If yes, p	s, please provide	<u>0</u>										
Project Name/Number		Sample Collector's Name	ollecto	r's Name		MATRIX			Z	DICA:	TE AN	ALYSIS RE	INDICATE ANALYSIS REQUESTED		Γ
NPDES/15-3069 ESTL		SANJIV VI	VASSAM	4				<u> </u>							
ns	Billing In	Billing Instructions	# and Ty	# and Type of Containers	_			eca							
X Standard 1-2 Day (100% Surcharge)					lue		nio	al C			TS				
Other 3 Day (50% Surcharge)			H2S0 UNI		ous		ride	olifor	horus Grea	itroge	SS				
Lab Use Only Sample Identification	-	Date/Time Sampled	04												
1901341-001 Landsdowne	01-24-19	9 8:10 AM	1 2 1		×		×	×	×	×	×				
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00 0		`				0	-								
The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this	half of the clie	nt, acknowledges	that he/sl	he has read	and unde	stands the term	s and con	ditions of	this		1	BottleOrder:	47974	87.8	1

The individual signing his agreement of behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.



E

AP ACCREC

WorkOrder: 19041665



May 03, 2019

Jennifer Gerwitz RJN Group 2000 South 8th St. St. Louis, MO 63104 TEL: (314) 588-9764

FAX:

RE: NPDES/15-3069 ESTL

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 4/24/2019 1:20:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Marvin L. Darling

Project Manager

(618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II

Page 1 of 8



Report Contents

http://www.teklabinc.com/

Client: RJN Group Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



Definitions

http://www.teklabinc.com/

Client: RJN Group Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
 - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
 - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- # Unknown hydrocarbon
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



Case Narrative

http://www.teklabinc.com/

Work Order: 19041665

Report Date: 03-May-2019

Client: RJN Group Client Project: NPDES/15-3069 ESTL

Cooler Receipt Temp: 12.82 °C

Locations

	Collinsville		Springfield	. 	Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Accreditations

http://www.teklabinc.com/

Client: RJN Group Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2020	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2019	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2019	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2019	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2019	Collinsville
Arkansas	ADEQ	88-0966		3/14/2020	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2020	Collinsville
Kentucky	KDEP	98006		12/31/2019	Collinsville
Kentucky	UST	0073		1/31/2019	Collinsville
Louisiana	LDPH	LA016		12/31/2019	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2019	Collinsville



Laboratory Results

http://www.teklabinc.com/

Client: RJN Group Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

Lab ID: 19041665-001 Client Sample ID: Landsdowne

Matrix: AQUEOUS Collection Date: 04/24/2019 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22NI	D ED. 9222 D MEMBR	ANE FILTER						
Fecal Coliform	*	100		9200	CFU/100ml	100	04/24/2019 15:42	R261002
EPA 1664A								
Hexane Extractable Material	NELAP	6		< 6	mg/L	1	04/30/2019 13:29	R261232
EPA 600 351.2 R2.0, 353.2 R	2.0							
Nitrogen, Total	*	1.05		2.30	mg/L	1	04/26/2019 0:00	R261065
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.300	mg/L	1	04/26/2019 12:26	152638
STANDARD METHODS 2540	D 1997							
Total Suspended Solids	NELAP	6	R	18	mg/L	1	04/29/2019 11:54	R261160
Sample and Duplicate RPD meet	the SOP QC criteria for le	ow level results	s. Data i	s reportable.				
STANDARD METHODS 4500	-CL E (TOTAL) 1997							
Chloride	NELAP	5		30	mg/L	1	05/01/2019 11:50	R261362



Laboratory Results

http://www.teklabinc.com/

Client: RJN Group Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

Lab ID: 19041665-002 Client Sample ID: Schoenberger

Matrix: AQUEOUS Collection Date: 04/24/2019 11:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22NI	D ED. 9222 D MEMBR	ANE FILTER	1					
Fecal Coliform	*	100		2900	CFU/100ml	100	04/24/2019 15:42	R261002
EPA 1664A								
Hexane Extractable Material	NELAP	6		< 6	mg/L	1	04/30/2019 13:29	R261232
Sample results may be low biase	d due to residue retained	in jar after fina	l hexane r	rinse.				
EPA 600 351.2 R2.0, 353.2 R	2.0							
Nitrogen, Total	*	1.05		2.43	mg/L	1	04/26/2019 0:00	R261065
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.453	mg/L	1	04/26/2019 12:28	152638
STANDARD METHODS 2540	D 1997							
Total Suspended Solids	NELAP	16		229	mg/L	2.63	04/30/2019 11:12	R261225
STANDARD METHODS 4500	-CL E (TOTAL) 1997							
Chloride	NELAP	10		92	mg/L	2	05/01/2019 11:52	R261362



Client: RJN Group

Receiving Check List

http://www.teklabinc.com/

Work Order: 19041665

Client Project: NPDES/15-3069 ESTL Report Date: 03-May-2019

Carrier: Employee Received By: MEK Elizabeth a thurley Reviewed by: Completed by: mbor Dilalli On: On: 24-Apr-2019 24-Apr-2019 Amber M. Dilallo Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 12.82 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **~** No 🗀 Yes **~** Chain of custody signed when relinquished and received? Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **V** No 🗌 Samples in proper container/bottle? Yes **~** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No \checkmark No 🗌 All samples received within holding time? Yes Field NA 🗸 Lab \square Reported field parameters measured: Yes 🗹 No \square Container/Temp Blank temperature in compliance? When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected. No VOA vials 🗸 Water – at least one vial per sample has zero headspace? Yes 📙 No 🗀 No TOX containers Yes No 🗌 Water - TOX containers have zero headspace? Yes 🗸 No 🗌 Water - pH acceptable upon receipt? NA 🗸 NPDES/CWA TCN interferences checked/treated in the field? Yes No 🗌

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY pg. of Work order # 19041465

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

	RJN Group									T	e	mn!	00.5			CF.		RIDE	ICE	M N	O ICE		17	<u>\$</u> 2	. °C				
Client:	2000 South 8th St.															.AB				17761 14	UI					ONL'	Y		
Address:										_					[388] L	AD B	\mathcal{M}	120	'			<u> </u>	<u> </u>		<u> </u>		ž.		
	/ Zip St. Louis, MO 631 Jennifer Gerwitz	0-4			/21	4) 58	29.07	761		- '	Lai	b No	otes			V	UN	A/V											
Contact:			Phone	:	(31	4) 50	00-91	04									'	•											
E-Mail:	jgerwitz@rjnmail.com		Fax:							- (Cli	ent	Con	nme	ents														
Are these sample Are there any requirements in the comm	s known to be involved in litist sknown to be hazardous? uired reporting limits to be ment section.	Yes	X No requested analysi	s?. If	yes,	plea	ıse p			О					,5	3"	NC	AA				4FE							
*******************************	ject Name/Number		Sample	Col	lect	or's	Na	ıme				MA	۱TR	ΙX				.	INE	DICA	TE/	ANAL	_YSI	S R	EQU	JEST	ED		
NPDES/15-3069	ESTL														,														
Result	s Requested	Billing	Instructions	#:	and 1	уре	of C	onta	iner	s 2	5				CALLED TO SERVICE OF THE SERVICE OF	ਹੁ	еса	an	Phosphorus	otal									
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Other	3 Day (50% Surcharge)			ĮĘ.	H2SO4	Š				Ġ	200					de	Fecal Coliform	Oil and Grease	orus	Total Nitrogen									
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The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder:

49587

AP ACCREC

WorkOrder: 19071005



July 22, 2019

Jennifer Gerwitz RJN Group 2000 South 8th St. St. Louis, MO 63104 TEL: (314) 588-9764

FAX:

RE: NPDES/15-3069 ESTL

RE: 141 DES/13 3007 ES1E

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 7/16/2019 11:26:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Marvin L. Darling

Project Manager (618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II



Report Contents

http://www.teklabinc.com/

Client: RJN Group Work Order: 19071005
Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



Definitions

http://www.teklabinc.com/

Client: RJN Group Work Order: 19071005

Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
 - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
 - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
 - RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- # Unknown hydrocarbon
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
 - S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



Client: RJN Group

Case Narrative

http://www.teklabinc.com/

Work Order: 19071005

Report Date: 22-Jul-2019

Client Project: NPDES/15-3069 ESTL

Cooler Receipt Temp: 15.2 °C

Locations

	Collinsville		Springfield	. 	Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Accreditations

http://www.teklabinc.com/

Client: RJN Group Work Order: 19071005

Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2020	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2020	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2020	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2020	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2019	Collinsville
Arkansas	ADEQ	88-0966		3/14/2020	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2020	Collinsville
Kentucky	KDEP	98006		12/31/2019	Collinsville
Kentucky	UST	0073		1/31/2020	Collinsville
Louisiana	LDPH	LA016		12/31/2019	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2020	Collinsville



http://www.teklabinc.com/

Client: RJN Group Work Order: 19071005

Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019

Lab ID: 19071005-001 Client Sample ID: Landsdowne

Matrix: AQUEOUS Collection Date: 07/16/2019 8:47

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch			
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER										
Fecal Coliform	*	100	9700	CFU/100ml	100	07/16/2019 14:56	R264428			
EPA 1664A										
Hexane Extractable Material	NELAP	6	< 6	mg/L	1	07/19/2019 10:05	R264583			
EPA 600 351.2 R2.0, 353.2 R	2.0									
Nitrogen, Total	*	1.05	2.98	mg/L	1	07/18/2019 0:00	R264488			
EPA 600 365.4 (TOTAL)										
Phosphorus, Total (as P)	NELAP	0.100	0.467	mg/L	1	07/18/2019 11:43	155439			
STANDARD METHODS 2540	D 1997									
Total Suspended Solids	NELAP	6	< 6	mg/L	1	07/18/2019 16:10	R264505			
STANDARD METHODS 4500-CL E (TOTAL) 1997										
Chloride	NELAP	8	32	mg/L	2	07/18/2019 16:31	R264518			



http://www.teklabinc.com/

Client: RJN Group Work Order: 19071005

Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019

Lab ID: 19071005-002 Client Sample ID: Schoenberger

Matrix: AQUEOUS Collection Date: 07/16/2019 9:07

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22NI	D ED. 9222 D MEMBR	ANE FILTER					
Fecal Coliform	*	100	3000	CFU/100ml	100	07/16/2019 14:56	R264428
EPA 1664A							
Hexane Extractable Material	NELAP	6	< 6	mg/L	1	07/19/2019 10:05	R264583
EPA 600 351.2 R2.0, 353.2 R	2.0						
Nitrogen, Total	*	1.05	2.28	mg/L	1	07/18/2019 0:00	R264488
EPA 600 365.4 (TOTAL)							
Phosphorus, Total (as P)	NELAP	0.100	0.302	mg/L	1	07/18/2019 11:45	155439
STANDARD METHODS 2540	D 1997						
Total Suspended Solids	NELAP	6	21	mg/L	1	07/18/2019 16:10	R264505
STANDARD METHODS 4500	-CL E (TOTAL) 1997						
Chloride	NELAP	8	63	mg/L	2	07/17/2019 14:38	R264470



Water - pH acceptable upon receipt?

NPDES/CWA TCN interferences checked/treated in the field?

Receiving Check List

http://www.teklabinc.com/

Work Order: 19071005 Client: RJN Group Client Project: NPDES/15-3069 ESTL Report Date: 22-Jul-2019 Carrier: Employee Received By: AMD Elizabeth a thurley Reviewed by: Completed by: mbor Dilalli On: On: 16-Jul-2019 16-Jul-2019 Amber M. Dilallo Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 15.2 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **~** No 🗀 Yes No 🗹 Chain of custody signed when relinquished and received? Yes **~** No 🗌 Chain of custody agrees with sample labels? Yes **V** No 🗌 Samples in proper container/bottle? Yes **~** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No \checkmark No 🗌 All samples received within holding time? Yes Field NA 🗸 Lab \square Reported field parameters measured: Yes 🗹 No 🗌 Container/Temp Blank temperature in compliance? When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected. No VOA vials 🗸 Water – at least one vial per sample has zero headspace? Yes 📙 No 🗀 No TOX containers Yes No 🗌 Water - TOX containers have zero headspace?

Yes 🗹

Yes

No 🗌

No 🗌

NA 🗸

CHAIN OF CUSTODY pg. ___ of ___ Work order # AD71005

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	RJN Group									S	amr	iles	on:	Ħ	ICE	E	BLUE	ICE	I N	O IC	E	50		°C	1	G	<u> </u>		
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	St. Louis, MO 63	104								ı	ab N			•		-	7-												
Contact:	Jennifer Gerwitz		Phone:	. ((314)	588 (-976	4		 	21.7	1010	Э.																
E-Mail:	jgerwitz@rjnmail.com		Fax:	•		X	15	0S		H		_						<u></u>		:				,				—	
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The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 51608

AP ACCREC

WorkOrder: 19101437



October 28, 2019

Jennifer Gerwitz RJN Group 2000 South 8th St. St. Louis, MO 63104 TEL: (314) 588-9764

FAX:

RE: NPDES/15-3069 ESTL

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 10/21/2019 12:15:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Marvin L. Darling

Project Manager

(618)344-1004 ex 41

mdarling@teklabinc.com

Mowin L. Darling II



Report Contents

http://www.teklabinc.com/

Client: RJN Group Work Order: 19101437
Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



Definitions

http://www.teklabinc.com/

Client: RJN Group Work Order: 19101437

Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
 - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
 - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- # Unknown hydrocarbon
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



Case Narrative

http://www.teklabinc.com/

Work Order: 19101437

Report Date: 28-Oct-2019

Client: RJN Group
Client Project: NPDES/15-3069 ESTL

Cooler Receipt Temp: 12.8 °C

Locations

	Collinsville		Springfield		Kansas City
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com
	Collinsville Air		Chicago		
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.		
	Collinsville, IL 62234-7425		Downers Grove, IL 60515		
Phone	(618) 344-1004	Phone	(630) 324-6855		
Fax	(618) 344-1005	Fax			
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com		



Accreditations

http://www.teklabinc.com/

Client: RJN Group Work Order: 19101437

Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2020	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2020	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2020	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2020	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2020	Collinsville
Arkansas	ADEQ	88-0966		3/14/2020	Collinsville
Illinois	IDPH	17584		5/31/2021	Collinsville
Indiana	ISDH	C-IL-06		1/31/2020	Collinsville
Kentucky	KDEP	98006		12/31/2019	Collinsville
Kentucky	UST	0073		1/31/2020	Collinsville
Louisiana	LDPH	LA016		12/31/2019	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2020	Collinsville



http://www.teklabinc.com/

Client: RJN Group Work Order: 19101437

Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

Lab ID: 19101437-001 Client Sample ID: Landsdowne

Matrix: AQUEOUS Collection Date: 10/21/2019 9:31

Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed	Batch			
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER										
Fecal Coliform	*	10	< 10	CFU/100ml	10	10/21/2019 14:04	R268434			
EPA 1664A										
Hexane Extractable Material	NELAP	6	< 6	mg/L	1	10/24/2019 12:55	R268617			
EPA 600 351.2										
Total Kjeldahl Nitrogen (as N)	NELAP	1.0	1.6	mg/L	1	10/22/2019 11:45	158539			
EPA 600 351.2 R2.0, 353.2 R2	2.0									
Nitrogen, Total	*	1.0	3.2	mg/L	1	10/25/2019 0:00	R268591			
EPA 600 353.2 R2.0 (TOTAL)										
Nitrogen, Nitrate-Nitrite (as N)	NELAP	0.500	1.61	mg/L	10	10/22/2019 20:48	R268472			
EPA 600 365.4 (TOTAL)										
Phosphorus, Total (as P)	NELAP	0.100	0.346	mg/L	1	10/22/2019 11:44	158536			
STANDARD METHODS 2540	D 1997									
Total Suspended Solids	NELAP	6	37	mg/L	1	10/24/2019 15:06	R268558			
STANDARD METHODS 4500-CL E (TOTAL) 1997										
Chloride	NELAP	4	29	mg/L	1	10/25/2019 23:07	R268657			



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Client: RJN Group Work Order: 19101437

Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

Lab ID: 19101437-002 Client Sample ID: Schoenberger

Matrix: AQUEOUS Collection Date: 10/21/2019 9:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER								
Fecal Coliform	*	100		1500	CFU/100ml	100	10/21/2019 14:04	R268434
EPA 1664A								
Hexane Extractable Material	NELAP	5		< 5	mg/L	1	10/24/2019 12:56	R268617
EPA 600 351.2								
Total Kjeldahl Nitrogen (as N)	NELAP	1.0		< 1.0	mg/L	1	10/22/2019 12:18	158540
EPA 600 351.2 R2.0, 353.2 R2	2.0							
Nitrogen, Total	*	1.0		5.3	mg/L	1	10/25/2019 0:00	R268591
EPA 600 353.2 R2.0 (TOTAL)								
Nitrogen, Nitrate-Nitrite (as N)	NELAP	1.00		5.32	mg/L	20	10/22/2019 20:50	R268472
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.555	mg/L	1	10/22/2019 12:17	158537
STANDARD METHODS 2540	D 1997							
Total Suspended Solids	NELAP	6	R	15	mg/L	1	10/24/2019 15:18	R268558
Sample and Duplicate RPD meet t	the SOP QC criteria for l	ow level results	s. Data is	reportable.				
STANDARD METHODS 4500-	CL E (TOTAL) 1997							
Chloride	NELAP	8		88	mg/L	2	10/25/2019 23:09	R268657



NPDES/CWA TCN interferences checked/treated in the field?

Receiving Check List

http://www.teklabinc.com/

NA 🗸

Work Order: 19101437 Client: RJN Group Client Project: NPDES/15-3069 ESTL Report Date: 28-Oct-2019

Carrier: Anthony Vitale Received By: KMT Elizabeth a thurley Reviewed by: Completed by: ntoon Ollalli On: On: 21-Oct-2019 21-Oct-2019 Amber M. Dilallo Elizabeth A. Hurley Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes 🗸 No Not Present Temp °C 12.8 Type of thermal preservation? Ice 🗹 Blue Ice None Dry Ice Chain of custody present? **~** No 🗀 Yes **~** Chain of custody signed when relinquished and received? Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **V** No 🗌 Samples in proper container/bottle? Yes **~** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes ~ No \checkmark No 🗌 All samples received within holding time? Yes Field NA 🗸 Lab \square Reported field parameters measured: Yes 🗹 No \square Container/Temp Blank temperature in compliance? When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected. No VOA vials 🗸 Water – at least one vial per sample has zero headspace? Yes 📙 No 🗀 No TOX containers Yes No 🗌 Water - TOX containers have zero headspace? Yes 🗹 No 🗌 Water - pH acceptable upon receipt?

> Yes Any No responses must be detailed below or on the COC.

No 🗌

CHAIN OF CUSTODY

Work order # 10101437

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005 ð bg.

12.8 °C 2.761	FOR LAB USE ONLY				72	INDICATE ANALYSIS REQUESTED												Date/Time	SIGI 61/16/01	
MOICE BLUEICE NO ICE	■ LAB 🙀 FIELD	100 H		ints	NOAA 0.25" 10/2	INDICATE	C	Fotal Pho: Oil an	Nitroge sphorus d Greas Colifor	se	× × × × ×	× × × × ×						Received By	- Vhr	
Samples on: MICE	Preserved in: 🔳 LAB	Lab Notes:		Client Comments	oN ₩ \$	MATRIX			ueous		×	×							Mymy	
			Phone: (314) 588-9764		☐ Yes , please provi	Sample Collector's Name		ns # and Type of Containers	Na2S2 H2SC UNI)4 >	am 121	1 2 1						Date/Time	21/19 12:15	
	St.	63104	Ph	Fax:	Are these samples known to be involved in litigation? If yes, a surcharge will apply Are these samples known to be hazardous? ☐ Yes ☒ No Are there any required reporting limits to be met on the requested analysis? If yes, limits in the comment section. ☐ Yes ☒ No			Billing Instructions		on Date/Time Sampled	10/21/19 9:31 am	10/21/199:51am	•			The state of the s			101	
RJN Group	2000 South 8th St	/ Zip St. Louis, MO 63104	Jennifer Gerwitz	jgerwitz@rjnmail.com	Are these samples known to be involved in litigation? I Are these samples known to be hazardous? \(\Bar{\text{T}}\) Yes Are there any required reporting limits to be met on the limits in the comment section. \(\Bar{\text{T}}\) Yes \(\Bar{\text{K}}\) No	Project Name/Number	ESTL	Results Requested	1-2 Day (100% Surcharge)	Sample Identification		Schoenberger		-		Trick to the state of the state		Relinquished By	and Male	
Client:	Address:	City / State / Zip	Contact:	E-Mail:	Are these samples known to be Are these samples known to be Are there any required reportininits in the comment section.	Pro	NPDES/15-3069 ESTL	าร	Standard Other	Lab Use Only	RICHEST	709							ande	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

53404

BottleOrder:

CERTIFICATE OF ATTENDANCE

Girthal Clemons

East St. Louis

Name

Organization

has participated in the MS4 training that included "Annual Report Preparation" and "O & M Manuals" presented by Jennifer Gerwitz of RJN Group held at the Shiloh Senior Center located at 1 Park Drive in Shiloh, Illinois on **February 28, 2019** and is awarded **1** PDH

Jennifer Gerwitz Project Engineer RJN Group, Inc.



The Choice for Collection System Solutions

CERTIFICATE OF ATTENDANCE

Sam Swanson	City of East St. Louis
Name	Organization

has participated in the MS4 training that included "Reducing Road Salt Use" presented by Danelle Haake from St. Louis University, Annual Reports, and Visual Water Sampling Training presented by Jennifer Gerwitz of RJN Group held at the Shiloh Senior Center located at 1 Park Drive in Shiloh, Illinois on **May 2, 2019** and is awarded **1** PDH

Jennifer Gerwitz Project Engineer RJN Group, Inc.

